

COST-EFFECTIVE WATER TANKS FOR DOMESTIC NEEDS

A novel idea to construct cost-effective, easy-to-build and durable water tanks using flowable cement mortar and thin precast concrete panels

CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai has developed cost-effective, easy-to-build and durable water tanks for domestic needs. The tanks can be easily constructed with flowable cement mortar without the need of skilled artisans. The tanks can also be built using thin precast concrete panels that do not require any lifting mechanism for placing on the roof.

FEATURES / HIGHLIGHTS

- Cost-effective compared to other commercially available tanks
- Easy-to-build, highly durable and safe for storing water
- Weight of the tank is relatively less when compared to RCC and masonry tanks
- A viable alternative to plastic tanks
- Tank construction using thin precast concrete panels can be assembled in 30 minutes with no special machinery required for lifting



TECHNICAL DETAILS

- Tank can be constructed with regular construction tools
- Total weight of the tank (of 1000 litres capacity) is less than 500 kg
- Simplified process technique
- Tanks can be constructed in various sizes
- Thickness of water tank wall is 25 mm. Simple formwork is sufficient to construct tank with precast concrete panels
- Tanks can be relocated. Do not require the mason of artisan type
- Environment friendly

TECHNOLOGY TRANSFER

Technology transferred to M/s. Lakshmi Srinivas Engineers, Hyderabad on non-exclusive basis. Technology is available for transfer to other interested players in the industry.



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